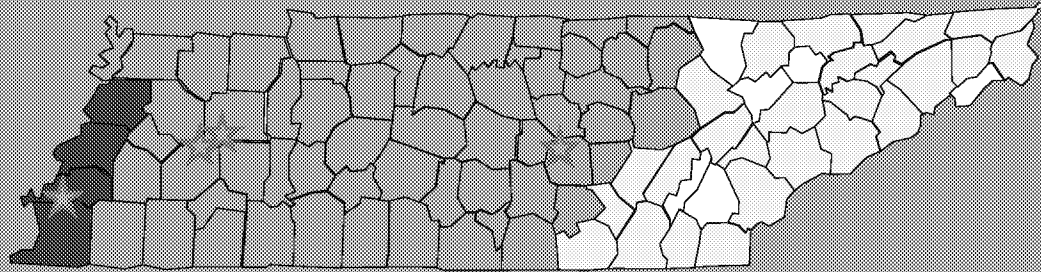


# Palmer amaranth Herbicide Resistance Estimates\* by County



ALS, Glyphosate, DNA and PPO Resistant



No row crop acres



ALS, Glyphosate and PPO Resistant

ALS and Glyphosate Resistant



Locations where escapes from field applications of dicamba also survived 0.5 lbs/a greenhouse dicamba applications:  
Further heritability studies and rate studies pending to confirm resistance...



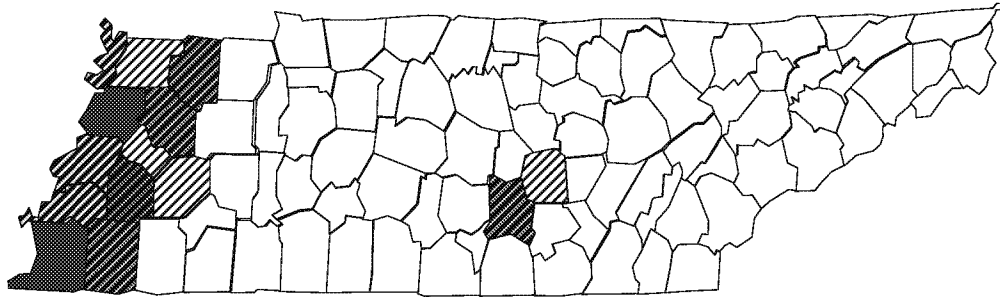
\*Palmer amaranth herbicide resistance estimates by county is based on published and unpublished research as well as Extension in-field experience

Steckel 2020

# Junglerice - Reasons for Lack of Control by County

1x rate of glyphosate is 32 oz/A of Roundup PM or 870 g ae ha<sup>-1</sup>

Glyphosate-Resistant Junglerice in Dyer and Shelby Counties were not controlled completely even with rates >2000 g ae ha<sup>-1</sup> ■■■



LD<sub>50</sub> Glyphosate rate of 200-400 g ae ha<sup>-1</sup>



LD<sub>50</sub> Glyphosate rate of 1100-1200 g ae ha<sup>-1</sup>



LD<sub>50</sub> Glyphosate rate of 470-580 g ae ha<sup>-1</sup>



Susceptible: Escapes Due to Dicamba/Glyphosate Antagonism



LD<sub>50</sub> Glyphosate rate of 680 g ae ha<sup>-1</sup>

